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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/403,505 01/02/00 KOCH

M 54270/

IM22/0207

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EXAMINER

TALBOT, B

ART UNIT

PAPER NUMBER

1762

DATE MAILED:

02/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/403,505

Applicant(s)

KOCH ET AL.

Examiner

Brian K Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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1. The amendment filed 11/28/00 has been considered and entered. Claim 16 has been added. Claims 1-16 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. This application contains claims 12-15 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

4. Claims 1-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted state of the art (specification, pg. 1 – pg. 2) in combination with Vijayakumar et al. (4,751,149) or Wernberg et al. (5,258,204).

Applicant admitted state of the art (specification, pg. 1 – pg. 2) teaches that it is well known in the art to form ZnO films on optical fibers by sputtering.

Applicant admitted state of the art (specification, pg. 1 – pg. 2) fails to teach a non-directional vapor deposition process.

Vijayakumar et al. (4,751,149) teaches a CVD process for depositing zinc oxide by a CVD process including a zinc precursor and water.

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Wernberg et al. (5,258,204) teaches a single source CVD process for forming metal oxides.

Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Applicant admitted state of the art (specification, pg. 1 – pg. 2) by forming the ZnO by a CVD process as evidenced by Vijayakumar et al. (4,751,149) and Wernberg et al. (5,258,204) because of the expectation of achieving similar results.

*Response to Amendment*

5. Applicant's arguments filed 11/28/00 have been fully considered but they are not persuasive.

Applicant argued that the prior art teaches directional coating by CVD and in particular that one of the references teaches tilting the substrate toward the vapor coating which supports applicant's assertion that the CVD is directional.

The Examiner agrees in part. The claims merely recite a "non-directional" gas and not even the technique utilized to provide this "non-directional" feature. It is clear from the specification and arguments that sputtering is a directional coating technique. Both references teach a CVD technique which does not include sputtering. In addition, the Figures clearly depict a flow of ZnO from a source to a substrate which is held on a holder. The gas is directional in the fact that the flow is toward the substrate. In addition, Applicant argued that the prior art teaches tilting the substrate which renders the deposition "directional". It is noted that

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the instant application, Fig. 2, depicts a substrate which is "tilted" toward the flow of gases. This is in direct contradiction to applicant arguments.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Tuesday-Friday 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-6078 for regular communications and (703) 305-6357 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.



Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT  
February 6, 2001